

<u>L10</u>	L9 and (receive\$ adj5 (configuration adj1 information\$)).ab.	0	<u>L10</u>
<u>L9</u>	L1 and (remot\$ adj3 configur\$).ab.	32	<u>L9</u>
<u>L8</u>	L7 and service\$.ab.	28	<u>L8</u>
<u>L7</u>	L1 and (remot\$ with configur\$).ab.	131	<u>L7</u>
<u>L6</u>	L2 and service\$.ab.	4	<u>L6</u>
<u>L5</u>	L2 and (e-mail\$ or email\$).ab.	0	<u>L5</u>
<u>L4</u>	L2 and email.ab.	0	<u>L4</u>
<u>L3</u>	L2 and (automatic\$)	18	<u>L3</u>
<u>L2</u>	L1 and ((receiv\$ or transmit\$) with (configur\$ adj2 information\$)).ab.	31	<u>L2</u>
<u>L1</u>	709/\$.cccls.	18249	<u>L1</u>

END OF SEARCH HISTORY

Refine Search

Search Results -

Term	Documents
CONFIGURATION	1003695
CONFIGURATIONS	347686
RECEIVES\$	0
RECEIVE	911687
RECEIVEA	5
RECEIVEABLE	149
RECEIVEABLES	1
RECEIVEABLY	33
RECEIVEABLY-COOKING	1
RECEIVEACCM	1
RECEIVEACK	1
(L9 AND (RECEIVES\$ ADJ5 (CONFIGURATION ADJ1 INFORMATIONS\$)).AB.).USPT.	0

There are more results than shown above. [Click here to view the entire set.](#)

Database:
 US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
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 EPO Abstracts Database
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Search: L10

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Set Name Query

side by side

DB=USPT; PLUR=YES; OP=ADJ

Hit Count Set Name

result set

Refine Search

Search Results -

Term	Documents
SERVICES\$	0
SERVICE	276656
SERVICEA	3
SERVICEABILITY	1
SERVICEABILITIES	2
SERVICEABILITY	4077
SERVICEABILITY-EVENT	8
SERVICEABILITY-FREQUENT	1
SERVICEABILITY-PARTICULARLY	1
SERVICEABILITY-REPAIRS	1
SERVICEABILITY/ACCURACY-PROCEDURE	1
(L2 AND SERVICES\$.AB.).USPT.	4

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Search:

L6

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Search History

DATE: Thursday, July 07, 2005 [Printable Copy](#) [Create Case](#)

Set Name Query

side by side

DB=USPT; PLUR=YES; OP=ADJ

L6 L2 and service\$.ab.

Hit Count Set Name
result set

4 L6

6289,377

L6/3 -

<u>L5</u>	L2 and (e-mail\$ or email\$).ab.	0	<u>L5</u>
<u>L4</u>	L2 and email.ab.	0	<u>L4</u>
<u>L3</u>	L2 and (automatic\$)	18	<u>L3</u>
<u>L2</u>	L1 and ((receiv\$ or transmit\$) with (configur\$ adj2 information\$)).ab.	31	<u>L2</u>
<u>L1</u>	709/\$.ccls.	18249	<u>L1</u>

END OF SEARCH HISTORY

date NG

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Generate Collection

L6: Entry 1 of 4

File: USPT

Oct 19, 2004

DOCUMENT-IDENTIFIER: US 6807266 B2

TITLE: Method and apparatus for provisioning a soft switch

Abstract Text (1):

A provisioning server (11) having various operating modes serves to provide a unified logical view of a soft switch (10) to a user via a display (14) and in response to receiving new service information from the user, provisioning corresponding configuration parameters to various of the logical communications support platforms (10A-F) that comprise the soft switch. Depending upon the mode of operation, the provisioning server can also receive current configuration parameter information from the logical platforms.

Current US Cross Reference Classification (2):709/220

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US006807266B2

(12) **United States Patent**
Tripathi et al.

(10) **Patent No.:** US 6,807,266 B2
(45) **Date of Patent:** Oct. 19, 2004

(54) **METHOD AND APPARATUS FOR
PROVISIONING A SOFT SWITCH**

(75) **Inventors:** Anoop Tripathi, Mount Prospect, IL
(US); Ashish Sardesai, Schaumburg, IL
(US); Sudhakar Ramakrishna, Lake
Zurich, IL (US)

(73) **Assignee:** 3Com Corporation, Santa Clara, CA
(US)

(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 98 days.

(21) **Appl. No.:** 10/232,149

(22) **Filed:** Aug. 30, 2002

(65) **Prior Publication Data**

US 2004/0042600 A1 Mar. 4, 2004

(51) **Int. Cl.⁷** H04M 3/42; G06F 15/177

(52) **U.S. Cl.** 379/201.12; 379/201.03;
709/220

(58) **Field of Search** 379/201.01, 201.12,
379/207.02, 201.03, 219, 242; 709/220,
223, 227; 370/401

(56) **References Cited**

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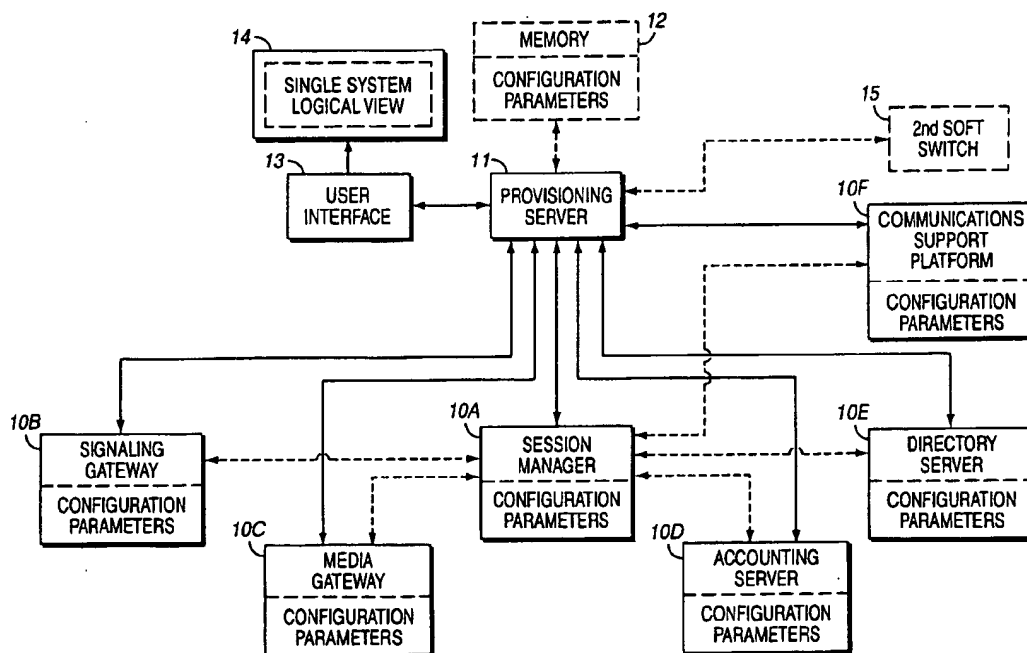
Primary Examiner—Benny Tieu

(74) *Attorney, Agent, or Firm*—Fitch, Even, Tabin &
Flannery

(57) **ABSTRACT**

A provisioning server (11) having various operating modes serves to provide a unified logical view of a soft switch (10) to a user via a display (14) and in response to receiving new service information from the user, provisioning corresponding configuration parameters to various of the logical communications support platforms (10A–F) that comprise the soft switch. Depending upon the mode of operation, the provisioning server can also receive current configuration parameter information from the logical platforms.

20 Claims, 4 Drawing Sheets





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L6: Entry 2 of 4

File: USPT

Oct 5, 2004

DOCUMENT-IDENTIFIER: US 6801920 B1

TITLE: System for remote management of applications of an industrial control system

Abstract Text (1):

A system for providing remote configuration management for an industrial control system (ICS) over a wide area network (such as the Internet), including keeping track of each application used by each device of the ICS, the system including: a configuration database, for keeping track of past and present configurations (which devices are or were in use by the ICS in each configuration); a remote sensing module, for determining information about the ICS devices and about applications used by the ICS devices; a configuration manager, for providing over the wide area network a restored copy of an application used by an ICS device; and utilities for enabling communication over a wide area network. The system optionally includes a billing manager that receives from the configuration manager information about each service performed by the configuration manager.

Current US Cross Reference Classification (3):709/201

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US006801920B1

(12) **United States Patent**
Wischinski

(10) **Patent No.:** **US 6,801,920 B1**
(45) **Date of Patent:** **Oct. 5, 2004**

(54) **SYSTEM FOR REMOTE MANAGEMENT OF APPLICATIONS OF AN INDUSTRIAL CONTROL SYSTEM**

(75) **Inventor:** **Rainer H. Wischinski**, Sandown, NH (US)

(73) **Assignee:** **Schneider Automation Inc.**, North Andover, MA (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 385 days.

(21) **Appl. No.:** **09/609,355**

(22) **Filed:** **Jul. 5, 2000**

(51) **Int. Cl.⁷** **G06F 17/30**

(52) **U.S. Cl.** **707/203; 707/7; 707/104.1; 709/201**

(58) **Field of Search** **717/1, 11; 455/428; 703/21; 709/201; 710/7, 302, 104, 8; 707/202, 203, 204, 7, 104.1, 8**

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Primary Examiner—Charles Rones

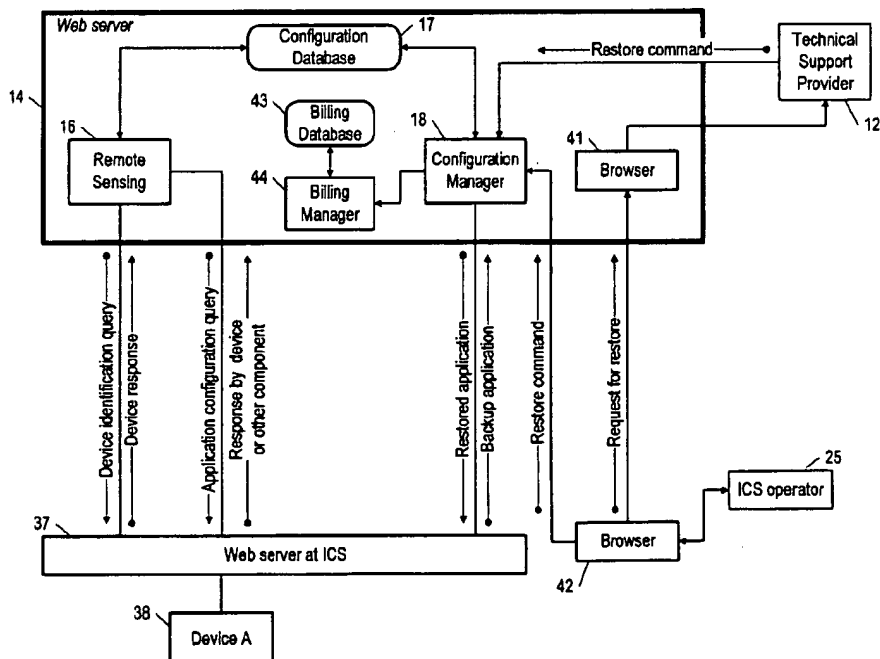
Assistant Examiner—Hassan Mahmoudi

(74) *Attorney, Agent, or Firm*—David R. Stacey

(57) **ABSTRACT**

A system for providing remote configuration management for an industrial control system (ICS) over a wide area network (such as the Internet), including keeping track of each application used by each device of the ICS, the system including: a configuration database, for keeping track of past and present configurations (which devices are or were in use by the ICS in each configuration); a remote sensing module, for determining information about the ICS devices and about applications used by the ICS devices; a configuration manager, for providing over the wide area network a restored copy of an application used by an ICS device; and utilities for enabling communication over a wide area network. The system optionally includes a billing manager that receives from the configuration manager information about each service performed by the configuration manager.

6 Claims, 2 Drawing Sheets



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L6: Entry 3 of 4

File: USPT

Sep 11, 2001

DOCUMENT-IDENTIFIER: US 6289377 B1

TITLE: Dynamic network configuration of a one-way adapter using a proxy agent that communicates with a resource server through a configured return path adapter

Abstract Text (1):

A one-way adapter such as a cable modem is initialized to allow a personal computer to receive data from a computer network such as the Internet via a broadcast channel, while transmitting data upstream to the computer network via a telephone line. First, a two-way adapter such as a phone modem is initialized by establishing a telephone link with a terminal server of an Internet Service Provider telephone network. The terminal server obtains an IP address from a phone network address server, and assigns the IP address to the phone modem stack. Next, the cable modem stack sends out a request for session initialization to a cable modem driver. The request is processed by a packet processing relay agent (PPRA), and the IP address of the phone modem is inserted into the packet. The IP packet destination address is set to that of a cable network address server. A cable network address server receives the packet via an upstream telephone line and responds with IP address and configuration information for the relay agent address. The phone modem receives the response and passes it to the cable modem stack via the PPRA. The cable modem is thus initialized with IP address and configuration information and is ready to receive Internet data via a one-way RF channel.

Current US Original Classification (1):709/222Current US Cross Reference Classification (1):709/245

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US006289377B1

(12) **United States Patent**
Lalwaney et al.

(10) Patent No.: **US 6,289,377 B1**
(45) Date of Patent: **Sep. 11, 2001**

(54) **DYNAMIC NETWORK CONFIGURATION OF A ONE-WAY ADAPTER USING A PROXY AGENT THAT COMMUNICATES WITH A RESOURCE SERVER THROUGH A CONFIGURED RETURN PATH ADAPTER**

(75) Inventors: **Poornima Lalwaney**, San Diego;
Jonathan A. Fellows, Del Mar, both of
CA (US)

(73) Assignee: **General Instrument Corporation**,
Horsham, PA (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/179,696**

(22) Filed: **Oct. 27, 1998**

Related U.S. Application Data

(60) Provisional application No. 60/065,055, filed on Nov. 10,
1997.

(51) Int. Cl.⁷ **G06F 13/00**

(52) U.S. Cl. **709/222; 709/245**

(58) Field of Search **709/203, 222,**
709/245

(56) **References Cited**

U.S. PATENT DOCUMENTS

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5,666,487 9/1997 Goodman et al. 709/246

5,862,220 * 1/1999 Perlman 380/21
5,978,381 * 11/1999 Perlman et al. 370/432

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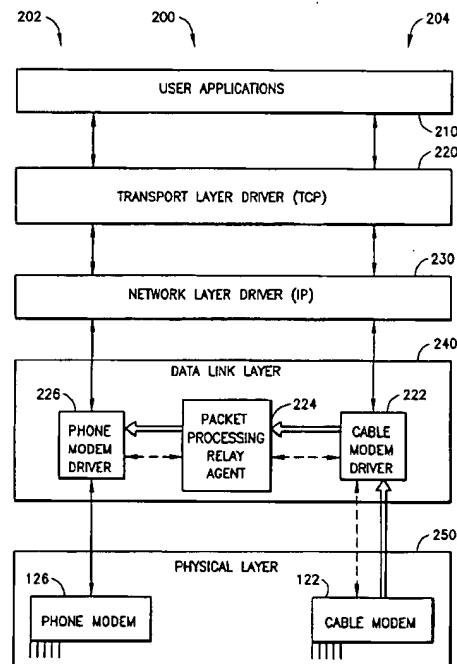
Primary Examiner—Kenneth R. Coulter

(74) *Attorney, Agent, or Firm*—Barry R. Lipsitz; Douglas
M. McAllister

(57) **ABSTRACT**

A one-way adapter such as a cable modem is initialized to allow a personal computer to receive data from a computer network such as the Internet via a broadcast channel, while transmitting data upstream to the computer network via a telephone line. First, a two-way adapter such as a phone modem is initialized by establishing a telephone link with a terminal server of an Internet Service Provider telephone network. The terminal server obtains an IP address from a phone network address server, and assigns the IP address to the phone modem stack. Next, the cable modem stack sends out a request for session initialization to a cable modem driver. The request is processed by a packet processing relay agent (PPRA), and the IP address of the phone modem is inserted into the packet. The IP packet destination address is set to that of a cable network address server. A cable network address server receives the packet via an upstream telephone line and responds with IP address and configuration information for the relay agent address. The phone modem receives the response and passes it to the cable modem stack via the PPRA. The cable modem is thus initialized with IP address and configuration information and is ready to receive Internet data via a one-way RF channel.

22 Claims, 9 Drawing Sheets



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L6: Entry 4 of 4

File: USPT

May 8, 2001

DOCUMENT-IDENTIFIER: US 6230195 B1

TITLE: Communication system, user apparatus, center apparatus, and terminal interface unit for use in communication system

Abstract Text (1):

A user apparatus periodically detects the mount state of any terminal interface card, and transmits, to a center apparatus, configuration information indicative of the configuration of the user apparatus and including the detection result, when responding to a request for delay time measurement. The center apparatus recognizes and manages the configuration of the user apparatus on the basis of the configuration information. When newly mounting or removing of a terminal interface card has been recognized, the center apparatus performs newly setting releasing of a destination identifier corresponding to the mounted or removed terminal interface card, and notifies the user apparatus of the newly set destination identifier. The user apparatus, in turn, manages identification information sent from the center apparatus, in relation to the terminal interface unit corresponding to the information. As a result, exchange, addition or cancel of communication services which the user uses can be performed easily.

Current US Original Classification (1):

709/220

Current US Cross Reference Classification (1):

709/221

Current US Cross Reference Classification (2):

709/226

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US006230195B1

(12) **United States Patent**
Sugawara et al.

(10) **Patent No.:** **US 6,230,195 B1**
 (45) **Date of Patent:** **May 8, 2001**

(54) **COMMUNICATION SYSTEM, USER APPARATUS, CENTER APPARATUS, AND TERMINAL INTERFACE UNIT FOR USE IN COMMUNICATION SYSTEM**

6,098,098 * 8/2000 Sandahl et al. 709/221
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(75) **Inventors:** Mitsuru Sugawara, Sagamihara;
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 Ibe, Yokohama, all of (JP)

(73) **Assignee:** Kabushiki Kaisha Toshiba, Kawasaki
 (JP)

(*) **Notice:** Subject to any disclaimer, the term of this
 patent is extended or adjusted under 35
 U.S.C. 154(b) by 0 days.

Primary Examiner—Zarni Maung
Assistant Examiner—Patrice Winder
 (74) **Attorney, Agent, or Firm—**Finnegan, Henderson,
 Farabow, Garrett & Dunner, L.L.P.

(57) **ABSTRACT**

A user apparatus periodically detects the mount state of any terminal interface card, and transmits, to a center apparatus, configuration information indicative of the configuration of the user apparatus and including the detection result, when responding to a request for delay time measurement. The center apparatus recognizes and manages the configuration of the user apparatus on the basis of the configuration information. When newly mounting or removing of a terminal interface card has been recognized, the center apparatus performs newly setting releasing of a destination identifier corresponding to the mounted or removed terminal interface card, and notifies the user apparatus of the newly set destination identifier. The user apparatus, in turn, manages identification information sent from the center apparatus, in relation to the terminal interface unit corresponding to the information. As a result, exchange, addition or cancel of communication services which the user uses can be performed easily.

(21) **Appl. No.:** 09/226,007

(22) **Filed:** Jan. 6, 1999

(30) **Foreign Application Priority Data**

Jan. 7, 1998 (JP) 10-001331

(51) **Int. Cl.⁷** G06F 15/177

(52) **U.S. Cl.** 709/220; 709/221; 709/226

(58) **Field of Search** 709/220, 221,
 709/222, 223, 226, 208, 231, 236, 252,
 249, 250, 230, 246; 710/8; 712/100

(56) **References Cited**

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18 Claims, 13 Drawing Sheets

